

Amendments to the Specification

Please add the following section on page 3 between the first and second paragraphs:

Brief Description of the Drawings

Figure 1A demonstrates the molecular weight of a combination of a catalyst system producing a polyethylene having a narrow molecular weight distribution with a catalyst system producing a polyethylene with a bimodal molecular weight distribution.

Figure 1B demonstrates the molecular weight of another combination of a catalyst system producing a polyethylene having a narrow molecular weight distribution with a catalyst system producing a polyethylene with a bimodal molecular weight distribution.

Figure 1C demonstrates the molecular weight of yet another combination of a catalyst system producing a polyethylene having a narrow molecular weight distribution with a catalyst system producing a polyethylene with a bimodal molecular weight distribution.

Please replace the paragraph bridging pages 3 and 4 with the following:

An advantage of the present method is that a polyolefin having a controlled molecular weight distribution can be formed. By tailoring the catalyst components and reaction conditions to select individual polyolefin components having a desired MWD, a final product having a more predictable and controlled MWD can be produced. In particular, the formation of the second polymer component having an MWD overlapping with that of the first component facilitates the mixing of the components and allows a final product to be produced which has improved mechanical properties and improved processing properties.

Please replace the paragraph bridging pages 4 and 5 with the following:

The breadth of the MWD can be determined in accordance with any method generally used in the art. Preferably the breadth is determined according to the polydispersion index (PDI), usually denoted by a D value. The PDI is defined as M_w/M_n , or the weight average molecular weight divided by the number average molecular weight. In the case of the bimodal component it is preferable that the polydispersion index, D, is from 5-9, more preferably D=5-7. In the case of the second component D is preferably less than 3 and more preferably D=2-3.

Please replace the last paragraph on page 6 with the following:

The substitution pattern of the indenyl groups is not especially limited, provided that the catalyst is isomerisable. Thus, one or both of the indenyl groups may be substituted or unsubstituted. Symmetrical substitution patterns are preferred (i.e. both Ind groups are substituted in the same positions with the same substituents). The indenyl groups of the catalyst are preferably substituted at the 2, 2', 4 and/or 4' positions.

Please replace the paragraph bridging pages 7 and 8 with the following:

The groups comprising heteroatoms described above, as well as any of the other groups defined above, may comprise one or more heteroatoms from any of groups IIIA, IVA, VA, VIA or VIIA of the Periodic Table, such as a B, Si, N, P, O, or S atom or a halogen atom (e.g. F, Cl, Br or I). Thus the substituent may comprise one or more of any of the common functional groups in organic chemistry, such as hydroxy groups, carboxylic acid groups, ester groups, ether groups, aldehyde groups, ketone groups, amine groups, amide groups, imine groups, thiol groups, thioether groups, sulphate groups, sulphonic acid groups, and phosphate groups etc. The substituent may also comprise derivatives of these groups, such as carboxylic acid anhydrides and carboxylic acid halides.

Please replace the last paragraph on page 8 with the following:

Preferably, the bridging group R" is an alkylidene group or a silyl group. The alkylidene group is preferably a C₁-C₄ alkylidene group. It is particularly preferred that the bridging group comprises a substituted or unsubstituted ethylidene group.

Please replace the paragraph bridging pages 12 and 13 with the following:

Suitable inorganic oxide materials which are desirably employed in accordance with this invention include Group IIA, IIIA, IVA or IVB metal oxides such as silica, alumina and mixtures thereof. Other inorganic oxides that may be employed either alone or in combination with the silica, or alumina are magnesia, titania, zirconia, and the like. Other suitable support materials, however, can be employed, for example, finely divided functionalised polyolefins such as finely divided polyethylene. Preferably, the support is a silica having a surface area comprised between 200 and 900 m²/g and a pore volume comprised between 0.5 and 4 ml/g.

Please replace the paragraph bridging pages 13 and 14 with the following:

In accordance with the invention, the olefin monomer, such as ethylene and the alpha-olefinic co-monomer is supplied to the reaction zone containing the metallocene catalyst. When making a LMW component, typically hydrogen is introduced into the reaction zone. When making a HMW component, typically an α -olefinic co-monomer is added to the reaction zone. Typical co-monomers include hexene, butene, octene or methylpentene, preferably hexene.